

### REMARKS

Although the Examiner indicated the drawings were accepted, this amendment revises the specification and drawings to comply with the objections from the draftsman dated March 3, 2000. A Petition for the Acceptance of Color Drawings was previously submitted in conjunction with an amendment filed April 18, 2003. A copy of the Petition is submitted herewith for the convenience of the Office. A decision on the petition is requested.

This amendment is submitted prior to or concurrently with the payment of the issue fee and complies with the provisions of 37 C.F.R. § 1.312, therefore, no petition or fee is required. No new matter has been added. Entry of the amendment and the revised drawing figures is requested.

Respectfully submitted,



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Date: February 23, 2004  
AFN

Enclosures: Replacement Sheets  
Annotated Sheets Showing Changes  
Courtesy copy of Petition to Accept Color Drawings



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR  
MACROPHAGE-LIKE CELL TRANSDUCTION

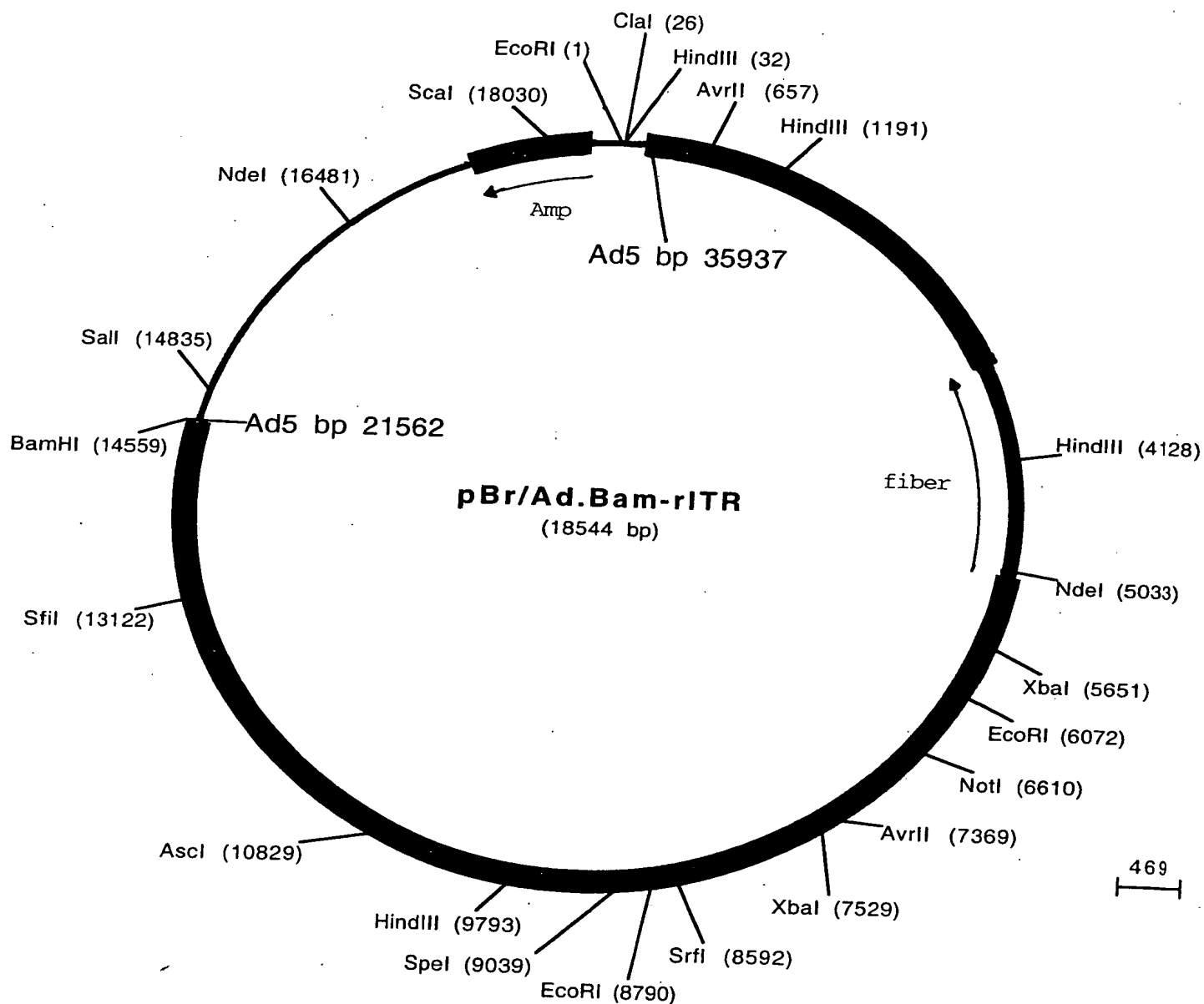
Inventor: Vogels et al.

Serial No.: 09/517,898

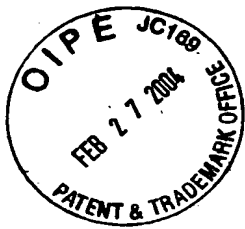
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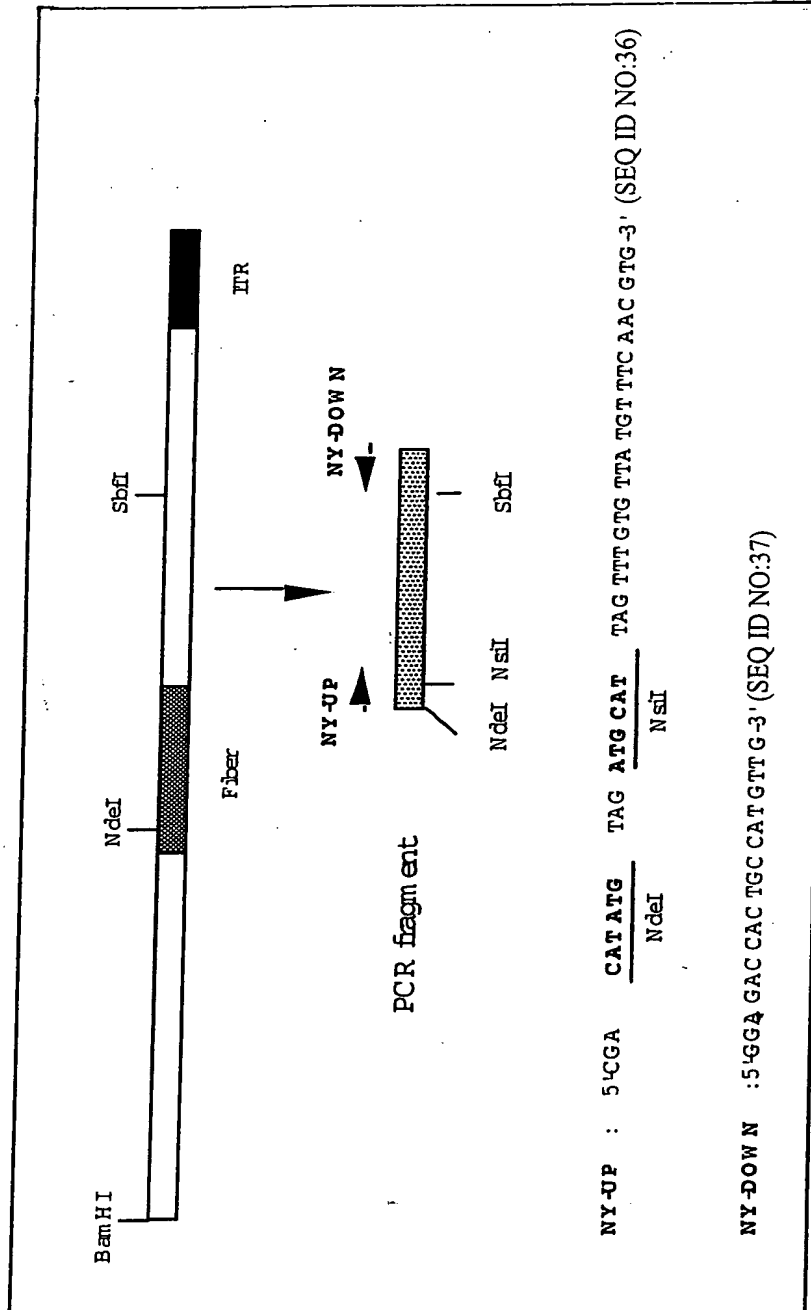
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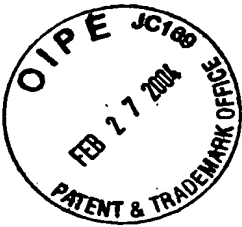
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Figure 2



remove border line



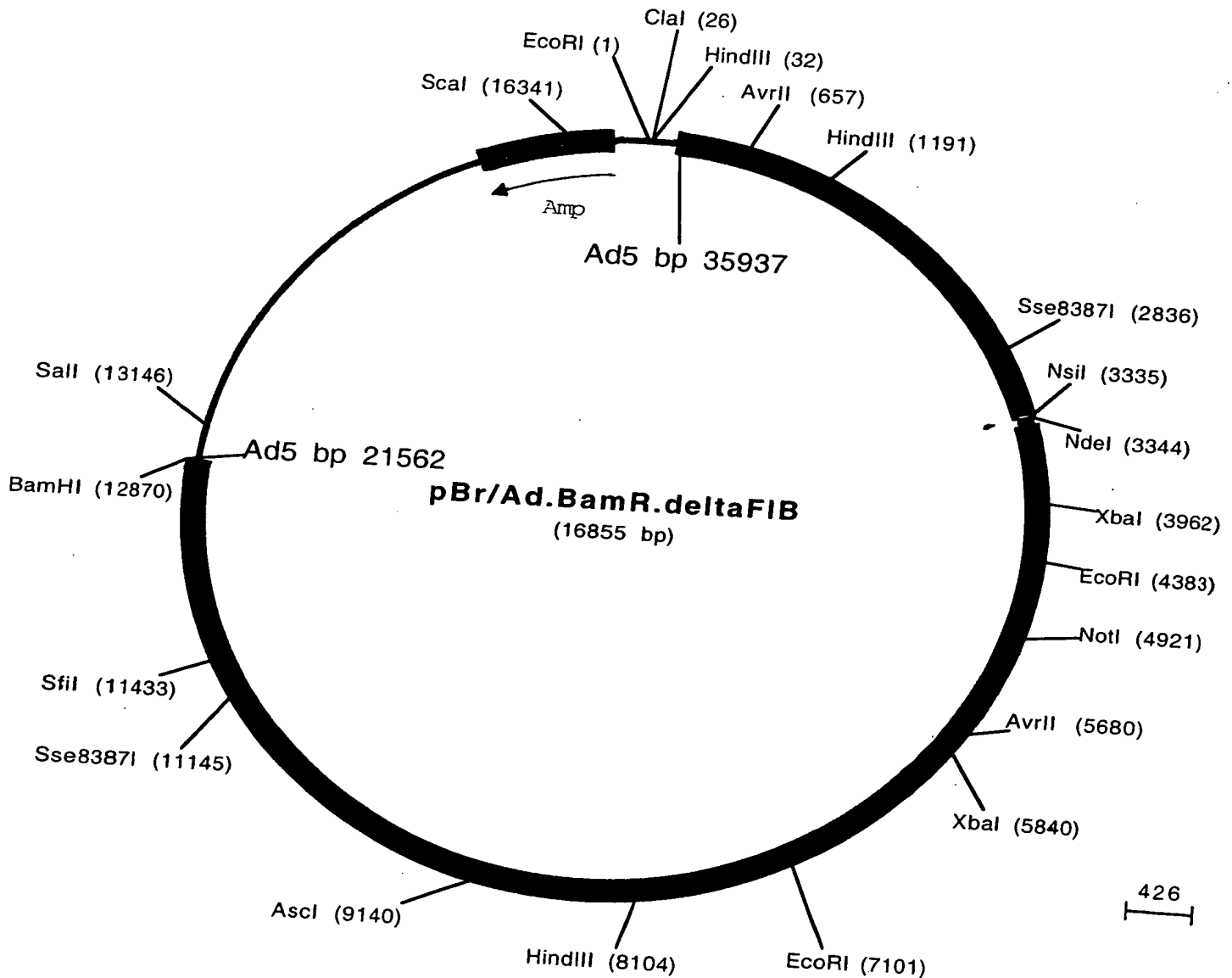
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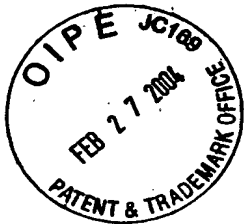
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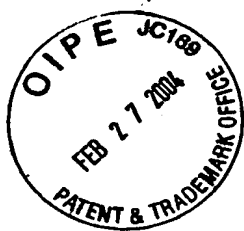
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Figure 4: ~~Sequence of Ad5/Fib16 chimeric fiber~~

ATGAAGCGCGCAAGACCGTCTGAAGATACCTTCAACCCCGTGTATCCATATGAAGATGAAAGCAGCT  
CACAACACCCCTTTATAAACCCCTGGTTTCATTTCCCTCAAATGGTTTTGCACAAAGCCCAGATGGAGT  
TCTAACTCTTAAATGTGTTAATCCACTCACTACCGCCAGCGGACCCCTCCAACCTTAAAGTTGGAAGC  
AGTCTTACAGTAGATACTATCGATGGGTCTTTGGAGGAAAATATAACTGCCGAAGCGCCACTCACTA  
AAACTAACCCTCCATAGGTTTATTAATAGGATCTGGCTTGCAAACAAAGGATGATAAACTTTGTTT  
ATCGCTGGGAGATGGGTGGTAACAAAGGATGATAAACTATGTTTATCGCTGGGAGATGGGTAAATA  
ACAAAAAATGATGTACTATGTGCCAAACTAGGACATGGCCTTGTTGTTGACTCTTCCAATGCTATCA  
CCATAGAAAACAACACCTTGTGGACAGGCGCAAAACCAAGCGCCAACCTGTGTAATTAAAGAGGGAGA  
AGATTCCCCAGACTGTAAGCTCACTTTAGTTCTAGTGAAGAATGGAGGACTGATAAATGGATACATA  
ACATTAATGGGAGCCTCAGAATATACTAACACCTTGTTTAAAAACAATCAAGTTACAATCGATGTAA  
ACCTCGCATTTGATAATACTGGCCAAATTATTACTTACCTATCATCCCTTAAAAGTAACCTGAACTT  
TAAAGACAACCAAAACATGGCTACTGGAACCATAACCAGTGCCAAAGGCTTCATGCCCAGCACCACC  
GCCTATCCATTTATAACATACGCCACTGAGACCTAAATGAAGATTACATTTATGGAGAGTGTTACT  
ACAAATCTACCAATGGAACCTCTTTCCACTAAAAGTTACTGTCACACTAAACAGACGTATGTTAGC  
TTCTGGAATGGCCTATGCTATGAATTTTTCATGGTCTCTAAATGCAGAGGAAGCCCCGGAACTACC  
GAAGTCACTCTCATTACCTCCCCCTTCTTTTTTCTTATATCAGAGAAGATGACTGAATGCATTAG

(SEQ ID NO:32)

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rotate*



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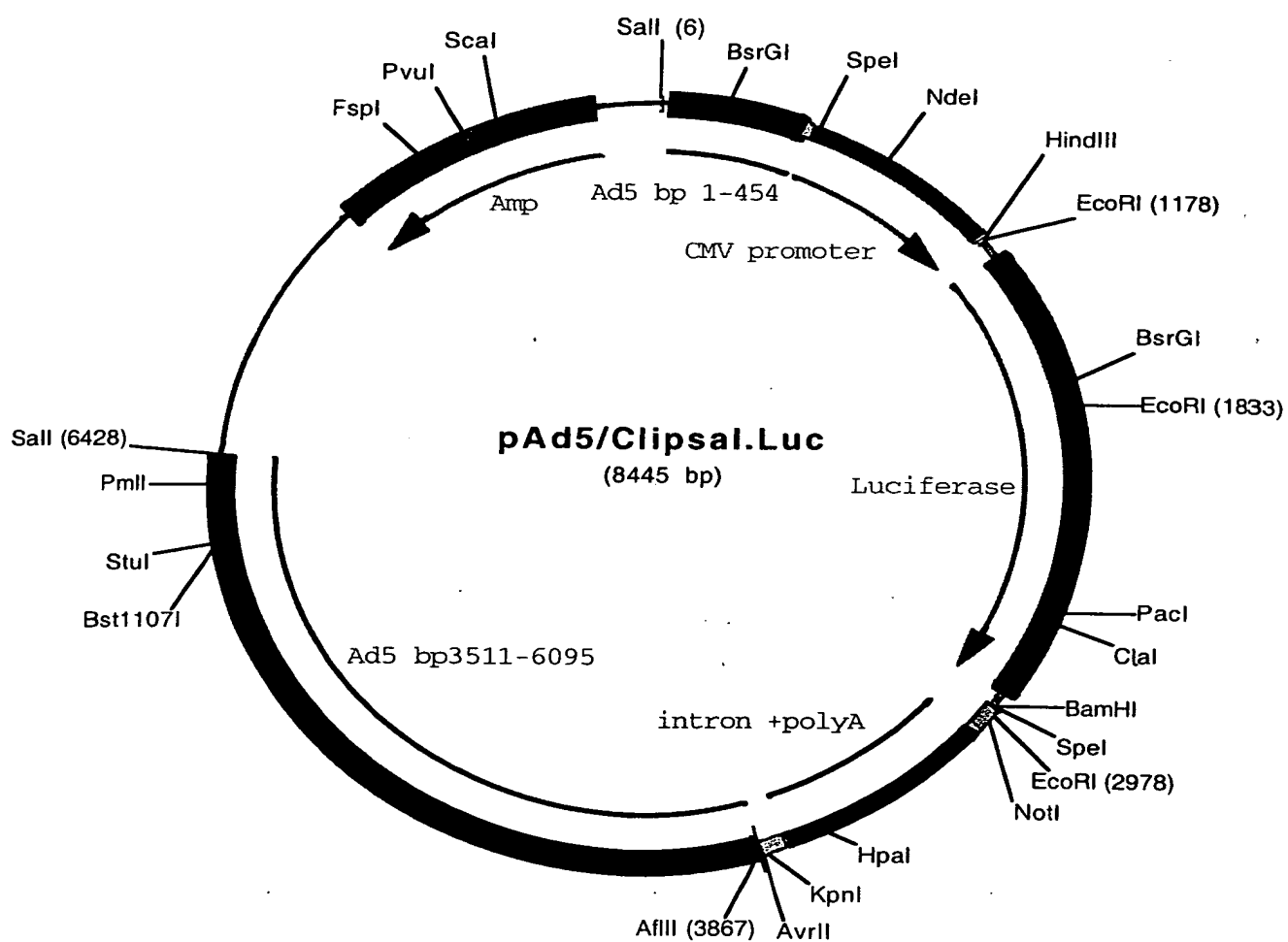
Inventor: Vogels et al.

Serial No.: 09/517,898

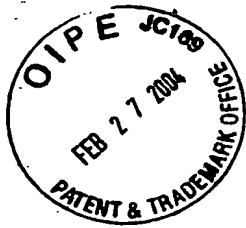
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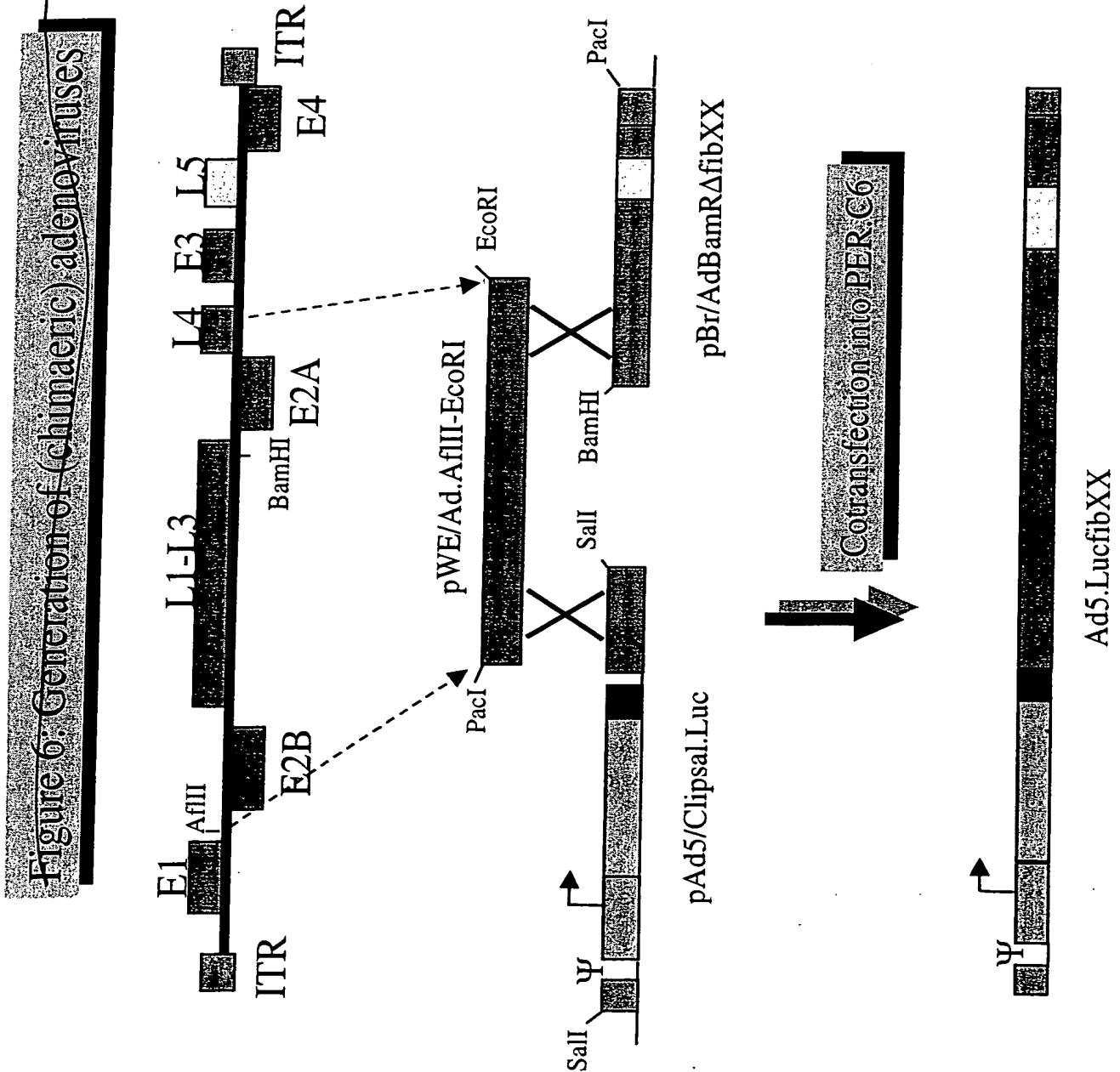
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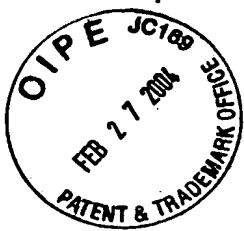
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① remove heading  
" " entered "Figure 6"



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FIGURE 7A

Alignment Report of alignment.DNA, using Clustal method with Weighted residue weight table.  
Wednesday, March 31, 1999 16:13

Page 1

1 ATGGC - CAAACGAGCTCGGCTAAGCAGCTCCTTCAATCCGGTCTACCCCT Fiber 16 Genbank (SEQ ID NO 3)  
1 ATG AAG C GCG C A A G A C C G T C T G A A - G A T A C C T T C A A C C C G T G T A T C C A T Ad5/16 Fiber DNA (SEQ ID NO 32)

50 ATGAAGATGAAAGCAGCTCACAAACACCCCTTTATAAACCCCTGGTTTCATT Fiber 16 Genbank  
50 ATGAAGATGAAAGCAGCTCACAAACACCCCTTTATAAACCCCTGGTTTCATT Ad5/16 Fiber DNA

100 TCCTCAAATGGTTTGTGCACAAAGCCAGATGGAGTTCTAACTCTTAAATG Fiber 16 Genbank  
100 TCCTCAAATGGTTTGTGCACAAAGCCAGATGGAGTTCTAACTCTTAAATG Ad5/16 Fiber DNA

150 TGTTAATCCACTCACTACCGCCAGCGGACCCCTCCAACCTTAAAGTTGGAA Fiber 16 Genbank  
150 TGTTAATCCACTCACTACCGCCAGCGGACCCCTCCAACCTTAAAGTTGGAA Ad5/16 Fiber DNA

200 GCAGTCTTACAGTAGATACTATCGATGGGTCTTTGGAGGAAAATATAACT Fiber 16 Genbank  
200 GCAGTCTTACAGTAGATACTATCGATGGGTCTTTGGAGGAAAATATAACT Ad5/16 Fiber DNA

250 GCCGCAGCGCCACTCACTAAAACCTAACCACTCCATAGGTTTATTAATAGG Fiber 16 Genbank  
250 GCCG A AGCGCCACTCACTAAAACCTAACCACTCCATAGGTTTATTAATAGG Ad5/16 Fiber DNA

300 ATCTGGCTTGCACAAACAAAGGATGATAAACTTTGTTTATCGCTGGGAGATG Fiber 16 Genbank  
300 ATCTGGCTTGCACAAACAAAGGATGATAAACTTTGTTTATCGCTGGGAGATG Ad5/16 Fiber DNA

350 GGTGGTAACAAAGGATGATAAACTATGTTTATCGCTGGGAGATGGGTTA Fiber 16 Genbank  
350 GGTGGTAACAAAGGATGATAAACTATGTTTATCGCTGGGAGATGGGTTA Ad5/16 Fiber DNA

400 ATAACAAAAAATGATGTACTATGTGCCAAACTAGGACATGGCCTTGTGTT Fiber 16 Genbank  
400 ATAACAAAAAATGATGTACTATGTGCCAAACTAGGACATGGCCTTGTGTT Ad5/16 Fiber DNA

450 TGACTCTTCCAATGCTATCACCATAGAAAACAACACCTTGTGGACAGGCG Fiber 16 Genbank  
450 TGACTCTTCCAATGCTATCACCATAGAAAACAACACCTTGTGGACAGGCG Ad5/16 Fiber DNA

500 CAAAACCAAGCGCCAACTGTGTAAATTAAAGAGGGAGAAGATTCCCCAGAC Fiber 16 Genbank  
500 CAAAACCAAGCGCCAACTGTGTAAATTAAAGAGGGAGAAGATTCCCCAGAC Ad5/16 Fiber DNA

550 TGTAAGCTCACTTTAGTTCTAGTGAAGAATGGAGGACTGATAAATGGATA Fiber 16 Genbank  
550 TGTAAGCTCACTTTAGTTCTAGTGAAGAATGGAGGACTGATAAATGGATA Ad5/16 Fiber DNA

600 CATAACATTAATGGGAGCCTCAGAATATACTAACACCTTGTTTAAAAACA Fiber 16 Genbank  
600 CATAACATTAATGGGAGCCTCAGAATATACTAACACCTTGTTTAAAAACA Ad5/16 Fiber DNA

650 ATCAAGTTACAATCGATGTAAACCTCGCATTTGATAAATACTGGCCAAATT Fiber 16 Genbank  
650 ATCAAGTTACAATCGATGTAAACCTCGCATTTGATAAATACTGGCCAAATT Ad5/16 Fiber DNA

700 ATTACTTACCTATCATCCCTTAAAAGTAACCTGAACCTTTAAAGACAACCA Fiber 16 Genbank  
700 ATTACTTACCTATCATCCCTTAAAAGTAACCTGAACCTTTAAAGACAACCA Ad5/16 Fiber DNA

750 AAACATGGCTACTGGAACCATAAACAGTGCCAAAGGCTTCATGCCCAGCA Fiber 16 Genbank  
750 AAACATGGCTACTGGAACCATAAACAGTGCCAAAGGCTTCATGCCCAGCA Ad5/16 Fiber DNA

800 CCACCGCCTATCCATTTATAACATACGCCACTGAGACCCCTAAATGAAGAT Fiber 16 Genbank  
800 CCACCGCCTATCCATTTATAACATACGCCACTGAGACCCCTAAATGAAGAT Ad5/16 Fiber DNA

850 TACATTTATGGAGAGTGTTACTACAAATCTACCAATGGAACTCTCTTTCC Fiber 16 Genbank  
850 TACATTTATGGAGAGTGTTACTACAAATCTACCAATGGAACTCTCTTTCC Ad5/16 Fiber DNA

900 ACTAAAAGTTACTGTACACTAAACAGACGTATGTTAGCTTCTGGAATGG Fiber 16 Genbank  
900 ACTAAAAGTTACTGTACACTAAACAGACGTATGTTAGCTTCTGGAATGG Ad5/16 Fiber DNA

950 CCTATGCTATGAATTTTTTCATGGTCTCTAAATGCAAGAGGAAAGCCCCGGAA Fiber 16 Genbank  
950 CCTATGCTATGAATTTTTTCATGGTCTCTAAATGCAAGAGGAAAGCCCCGGAA Ad5/16 Fiber DNA

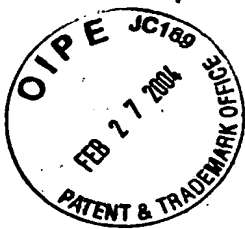
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1000 ACTACCGAAGTCACTCTCATTACCTCCCCCTTCTTTTTTTCTTATATCAG Ad5/16 Fiber DNA

1050 AGAAGATGACTGA Fiber 16 Genbank  
1050 AGAAGATGACTGAATGCATTAGTTTGTGTTATGTTTCAACGTGTTTATTT Ad5/16 Fiber DNA

1062 Fiber 16 Genbank  
1100 TCAATTG Ad5/16 Fiber DNA

Decoration 'Decoration #1': Box residues that differ from Fiber 16 Genbank.





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FIGURE ~~3B~~ 7C

Alignment Report of alignment.prot, using Clustal method with PAM250 residue weight table.  
Wednesday, March 31, 1999 16:19

Page

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1  M A K R A R L S S - S F N P V Y P Y E D E S S S Q H P F I N genbank Fiber 16 (SEQ ID NO:35)
1  M - K R A R P S E D T F N P V Y P Y E D E S S S Q H P F I N chimeric Ad5/Fib16 (SEQ ID NO:34)

30  P G F I S S N G F A Q S P D G V L T L K C V N P L T T A S G genbank Fiber 16
30  P G F I S S N G F A Q S P D G V L T L K C V N P L T T A S G chimeric Ad5/Fib16

60  P L Q L K V G S S L T V D T I D G S L E E N I T A A A P L T genbank Fiber 16
60  P L Q L K V G S S L T V D T I D G S L E E N I T A A A P L T chimeric Ad5/Fib16

90  K T N H S I G L L I G S G L Q T K D D K L C L S L G D G L V genbank Fiber 16
90  K T N H S I G L L I G S G L Q T K D D K L C L S L E D G L V chimeric Ad5/Fib16

120 T K D D K L C L S L G D G L I T K N D V L C A K L G H G L V genbank Fiber 16
120 T K D D K L C L S L G D G L I T K N D V L C A K L G H G L V chimeric Ad5/Fib16

150 F D S S N A I T I E N N T L W T G A K P S A N C V I K E G E genbank Fiber 16
150 F D S S N A I T I E N N T L W T G A K P S A N C V I K E G E chimeric Ad5/Fib16

180 D S P D C K L T L V L V K N G G L I N G Y I T L M G A S E Y genbank Fiber 16
180 D S P D C K L T L V L V K N G G L I N G Y I T L M G A S E Y chimeric Ad5/Fib16

210 T N T L F K N N Q V T I D V N L A F D N T G Q I I T Y L S S genbank Fiber 16
210 T N T L F K N N Q V T I D V N L A F D N T G Q I I T Y L S S chimeric Ad5/Fib16

240 L K S N L N F K D N Q N M A T G T I T S A K G F M P S T T A genbank Fiber 16
240 L K S N L N F K D N Q N M A T G T I T S A K G F M P S T T A chimeric Ad5/Fib16

270 Y P F I T Y A T E T L N E D Y I Y G E C Y Y K S T N G T L F genbank Fiber 16
270 Y P F I T Y A T E T L N E D Y I Y G E C Y Y K S T N G T L F chimeric Ad5/Fib16

300 P L K V T V T L N R R M L A S G M A Y A M N F S W S L N A E genbank Fiber 16
300 P L K V T V T L N R R M L A S G M A Y A M N F S W S L N A E chimeric Ad5/Fib16

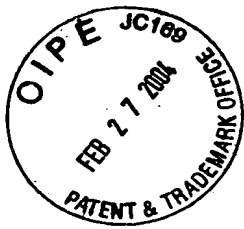
330 E A P E T T E V T L I T S P F F F S Y I R E D D genbank Fiber 16
330 E A P E T T E V T L I T S P F F F S Y I R E D D chimeric Ad5/Fib16
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Decoration 'Decoration #1': Box residues that differ from genbank Fiber 16 .

Rotate to fit template

Amend to be Fig 7C

Remove page number



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~~FIG 8~~

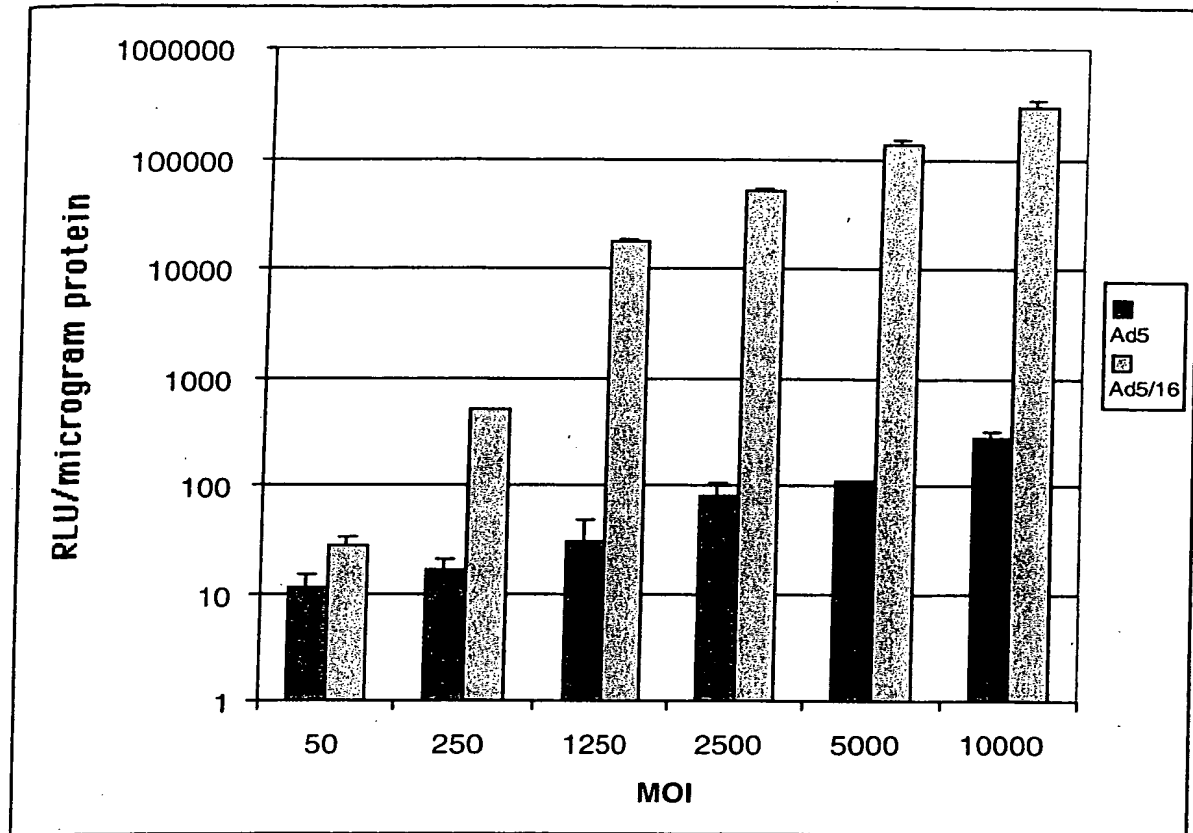
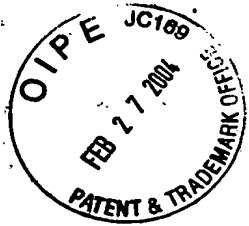


Figure 8

- ① Rotate + Enlarge + remove border
- ② Add Centered "FIGURE 8"



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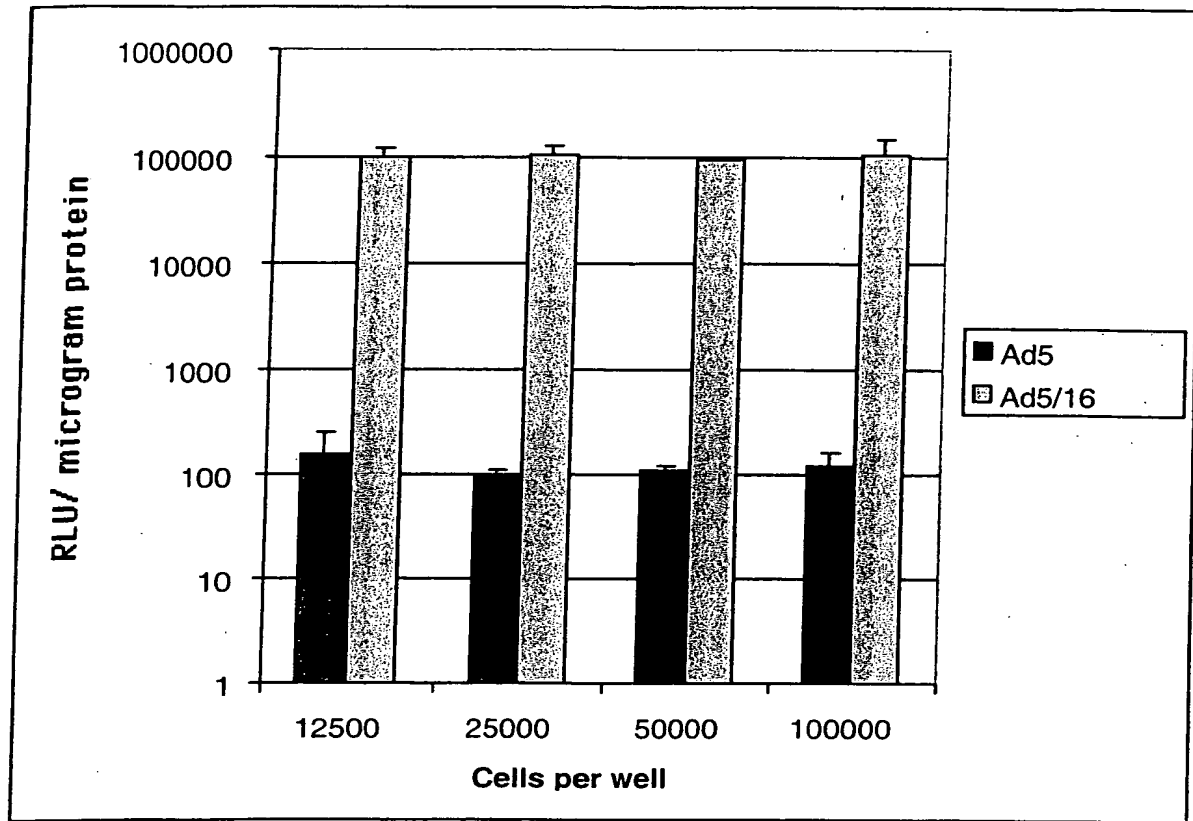
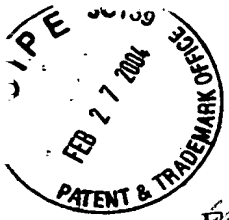


Figure 9

- ① Rotate + enlarge + remove border
- ② add centered "Figure 9".



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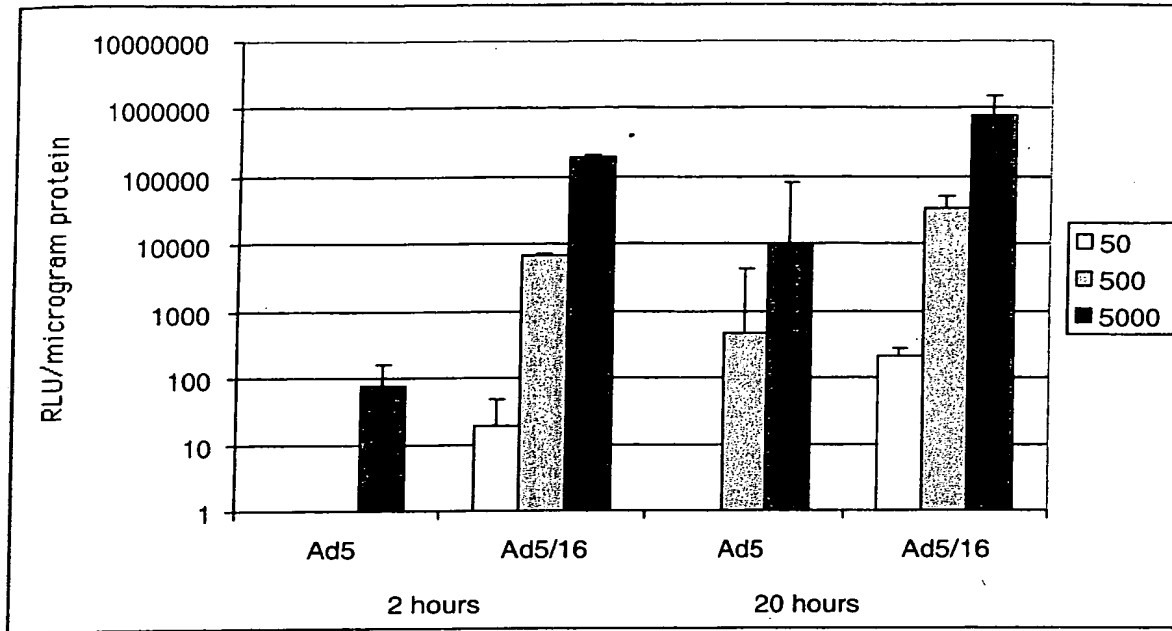
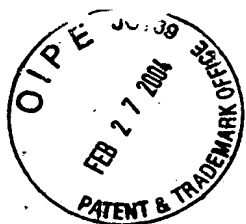


FIGURE 10

- ① Rotate + Enlarge + remove border
- ② add centered "Figure 10"



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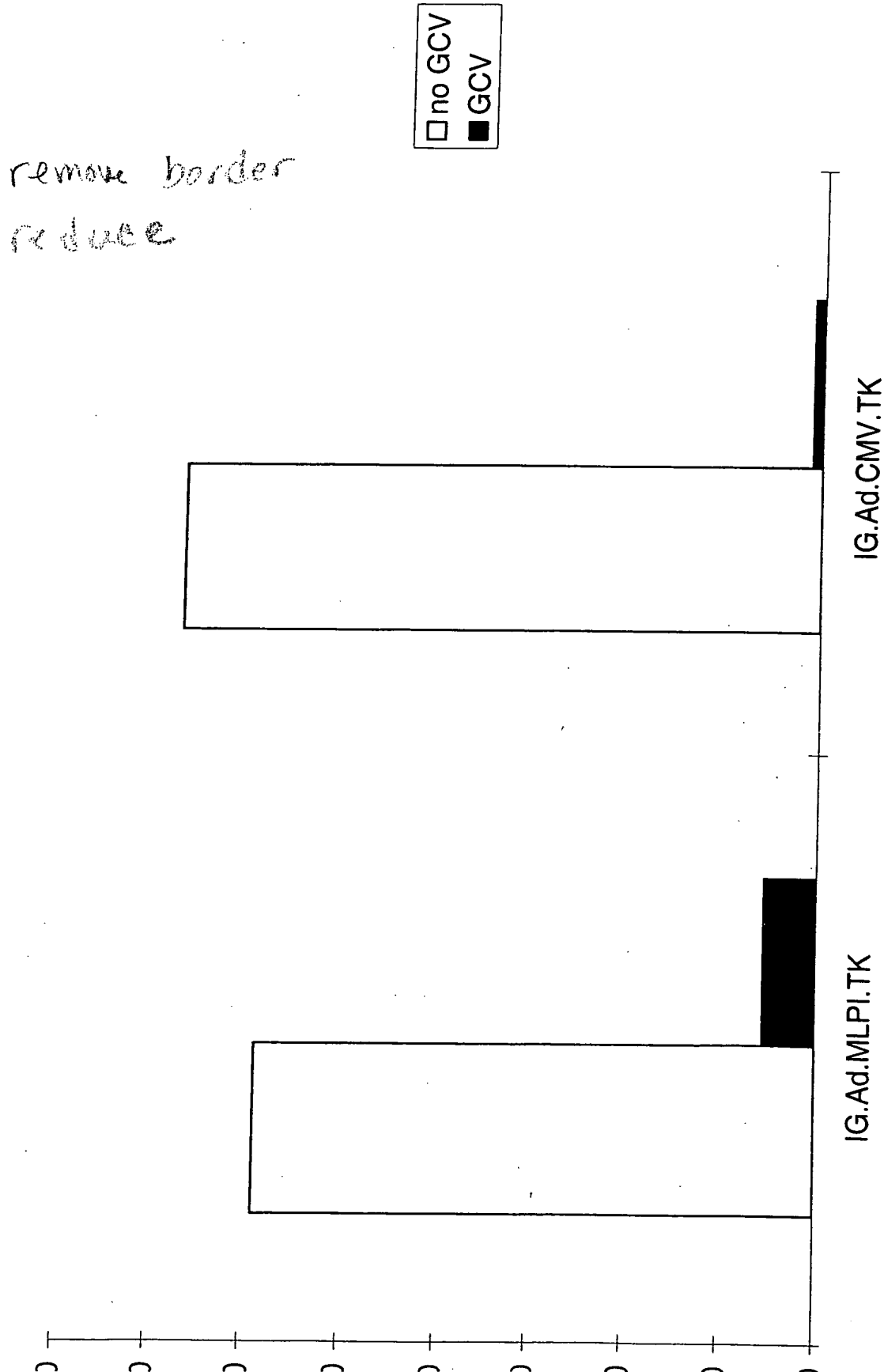
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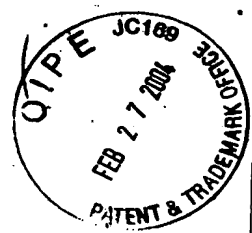
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FIGURE 11

Synoviocytes infected with Ad.TK





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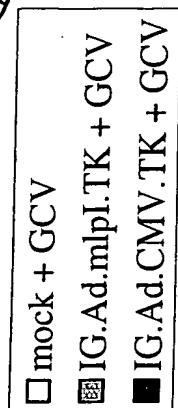
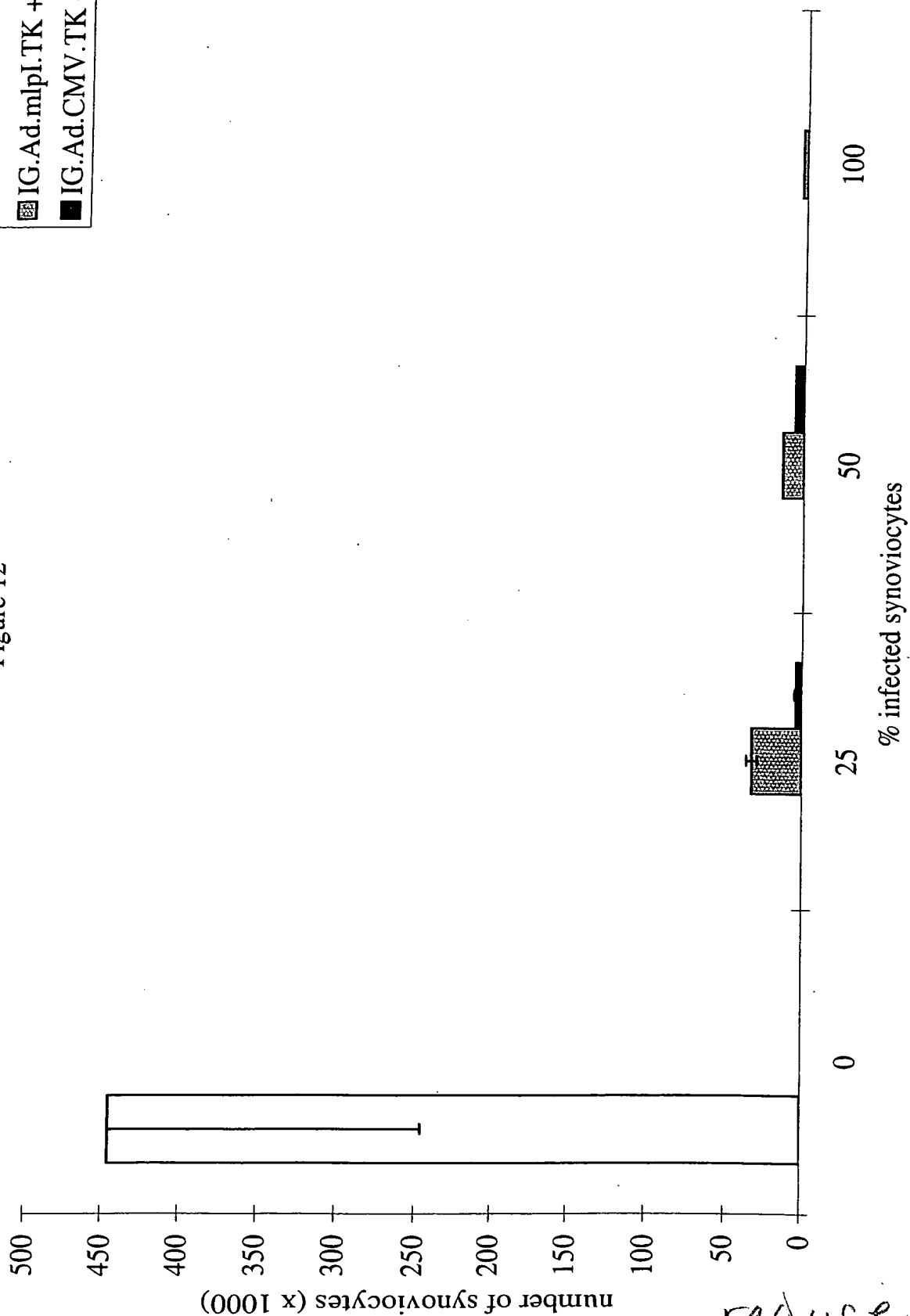


Figure 12



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR  
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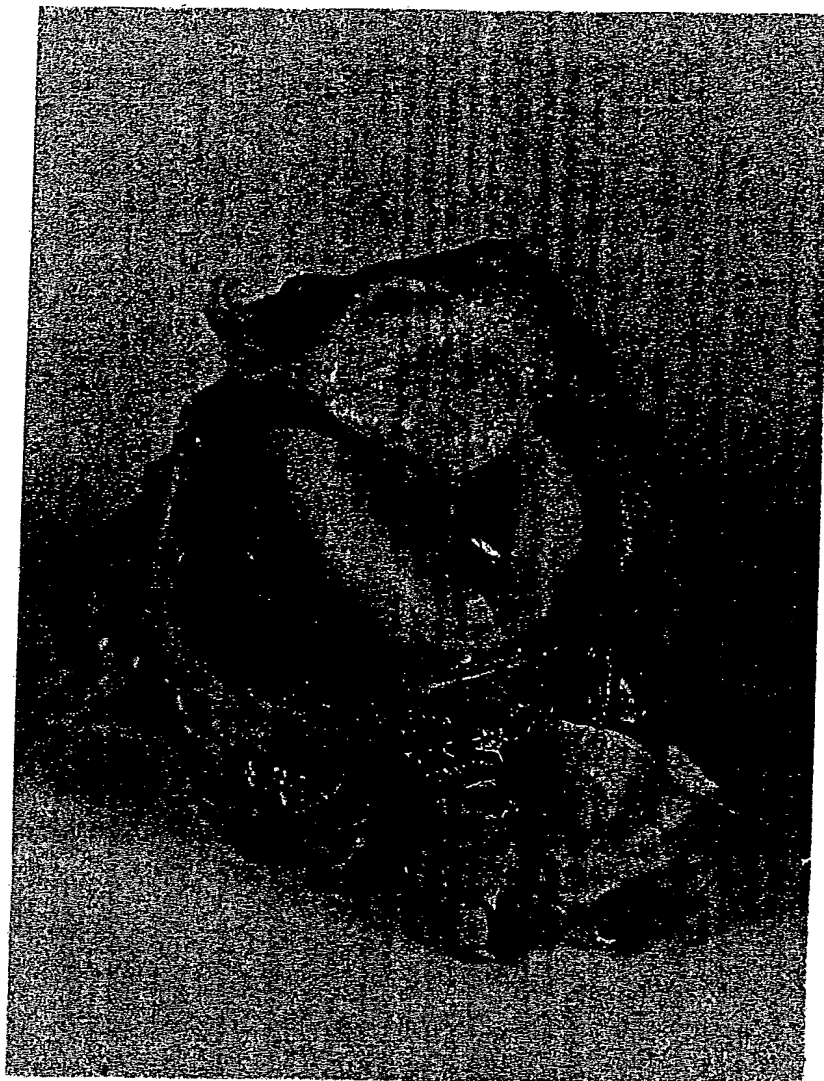
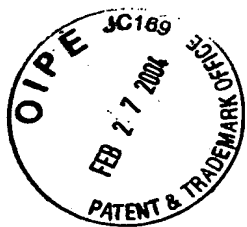
Inventor: Vogels et al.

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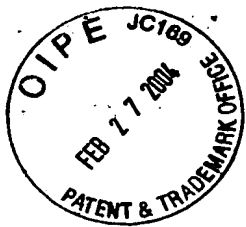
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FIGURE 13A



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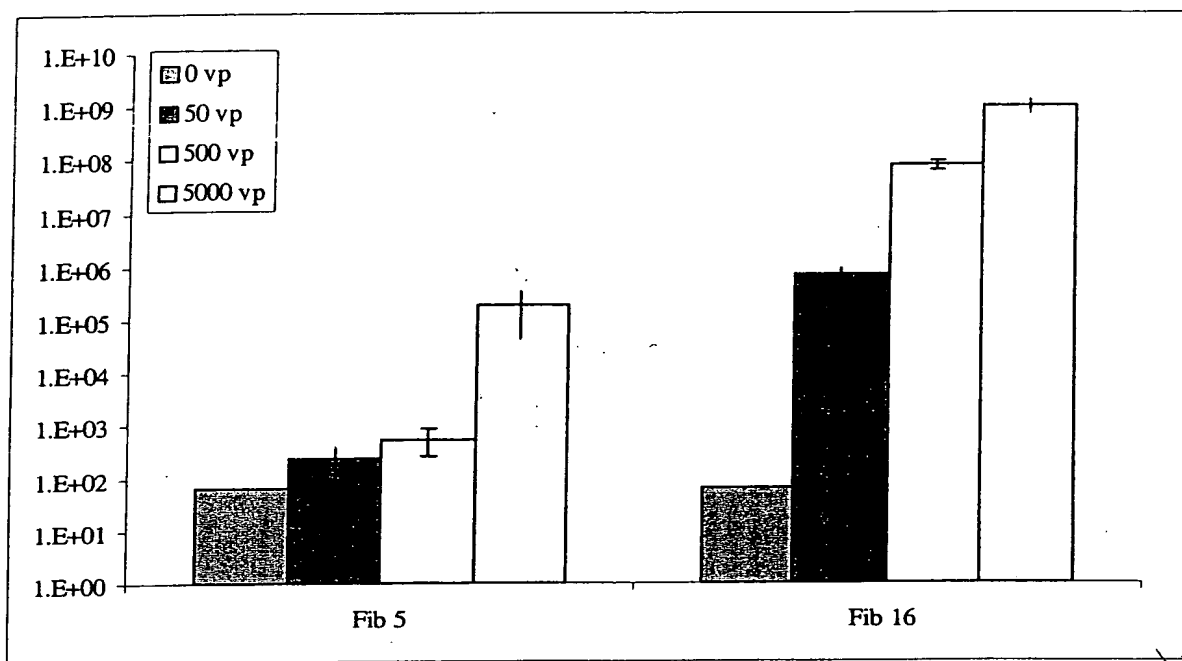
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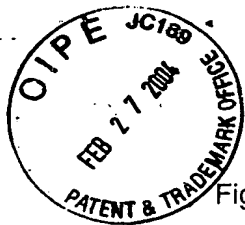
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Figure 14: Comparison of infection of Ad5.luc and Ad5.fib16.luc on RA synoviocytes



① Enlarge + Rotate + Remove Border : Fig. legend  
② add centered "FIGURE 14"





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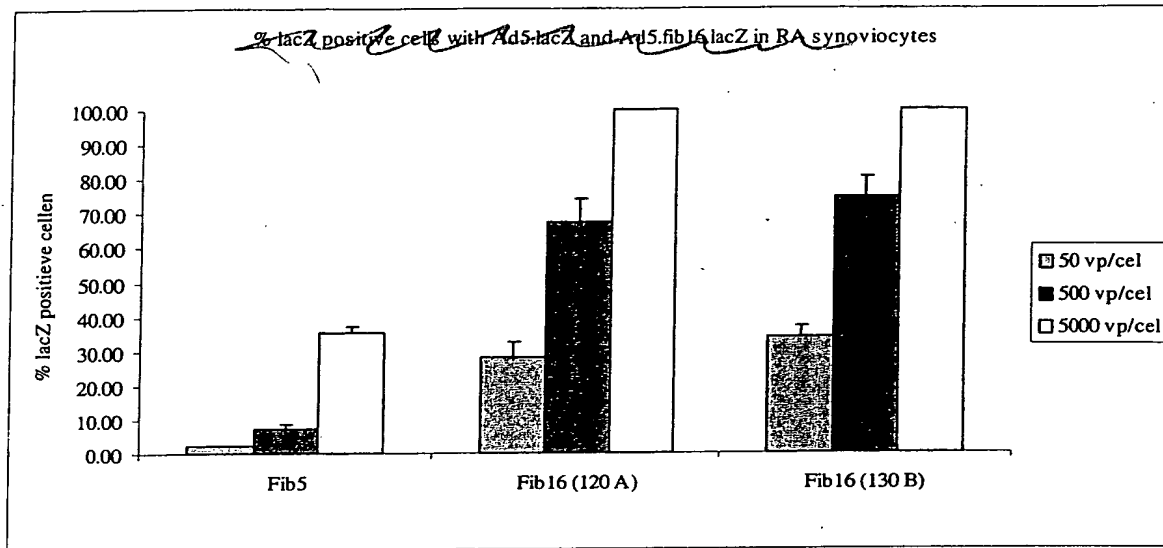
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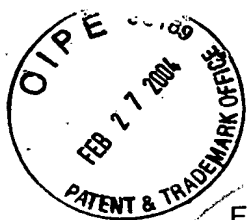
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Figure 15



- ① Enlarge + Rotate + Remove Border : Fig. legend.
- ② add centered "FIGURE 15"



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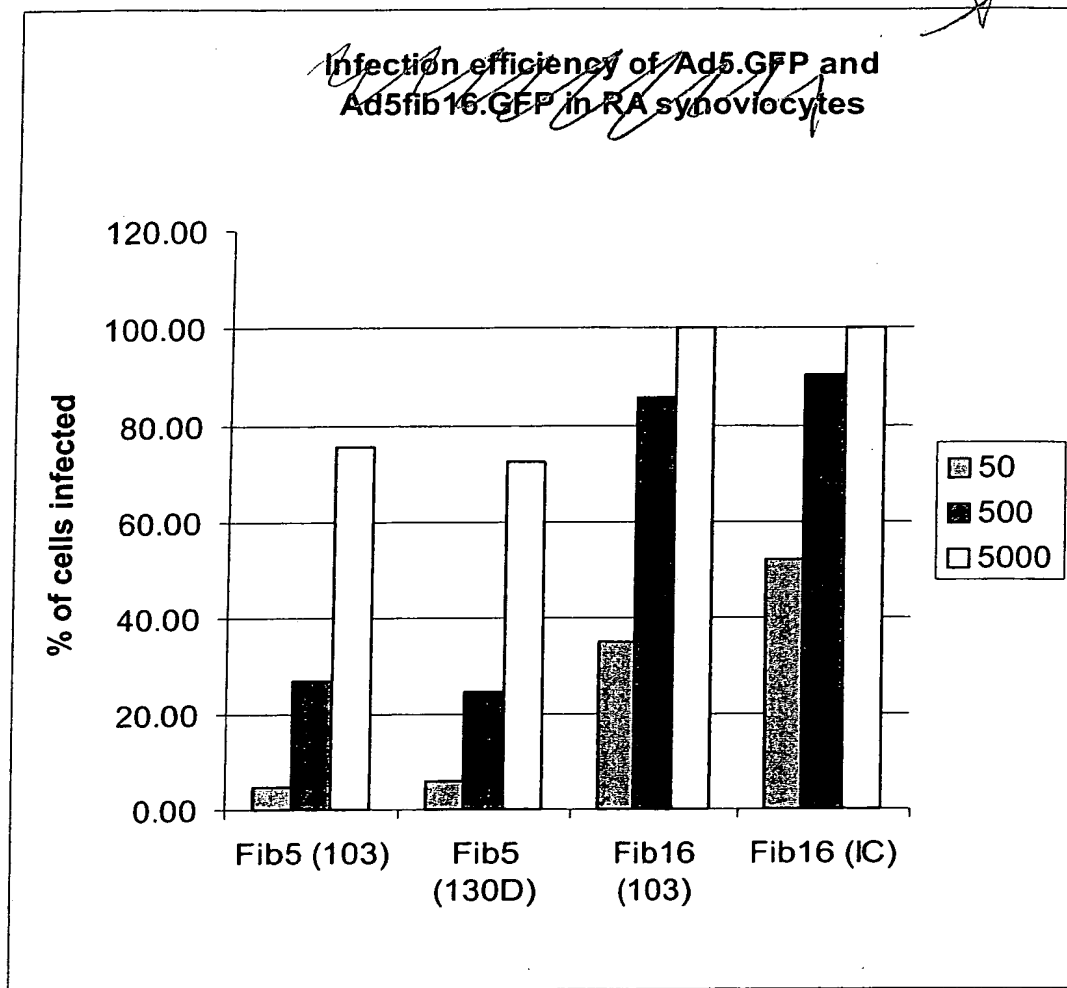
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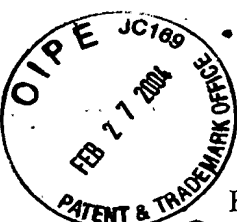
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Figure 16A



- ① Enlarge + Rotate + Remove Border : Fig. legends
- ② add centered "FIGURE 16A"



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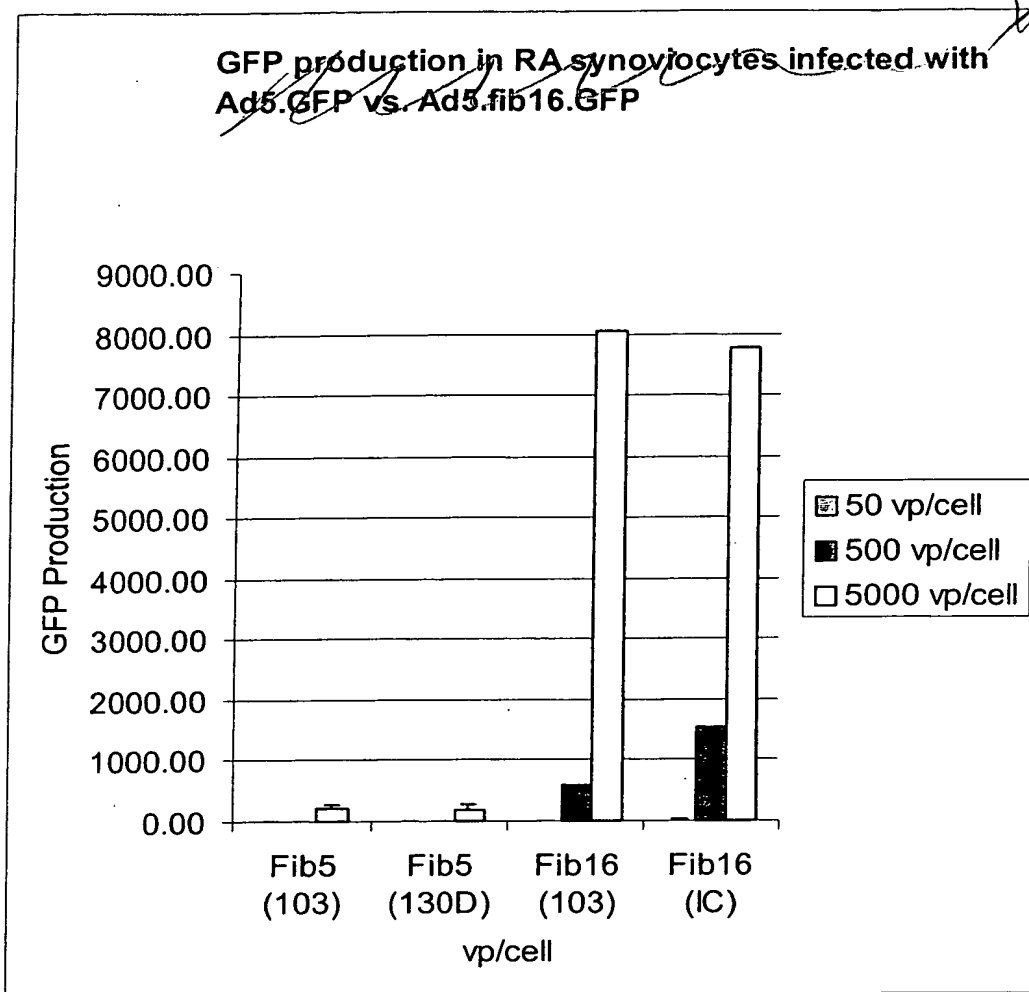
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Figure 16B



- ① Enlarge + Rotate + Remove Border : Fig. legend
- ② add centered "FIGURE 16B"



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Figure 17: infectivity of panel of chimeric adenoviruses on RA synoviocytes

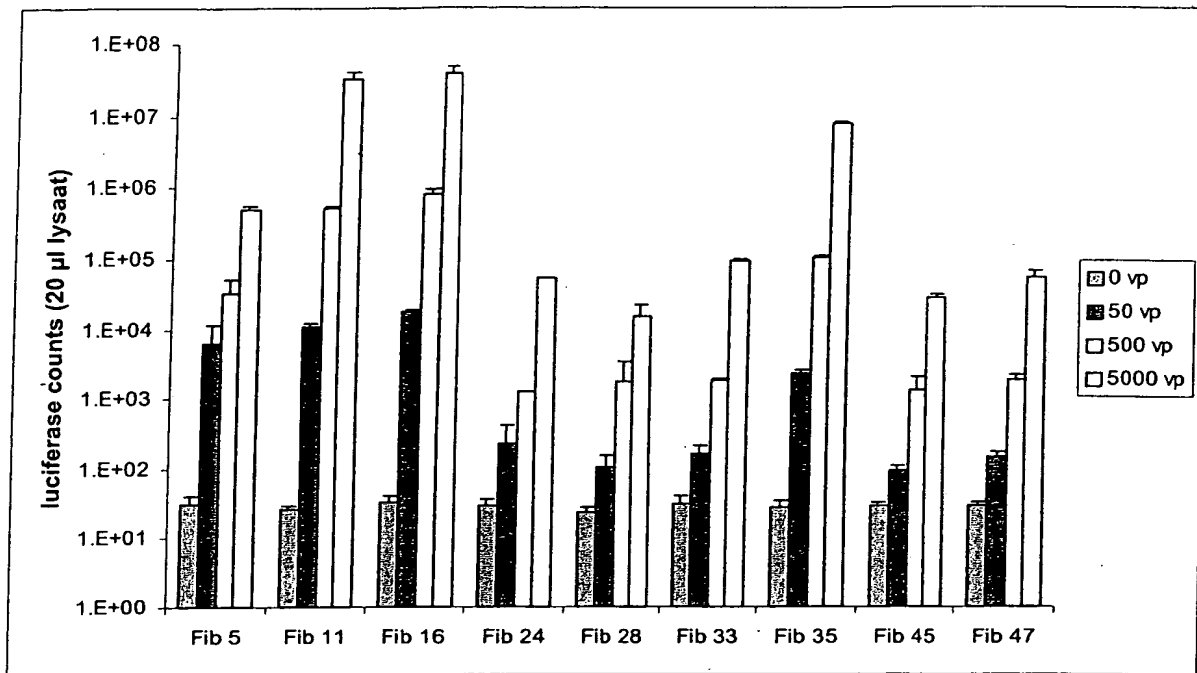
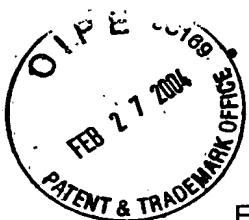


FIGURE 17

- ① Enlarge + Rotate + Remove Border : Fig. legend
- ② add centered "FIGURE 17"



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR  
MACROPHAGE-LIKE CELL TRANSDUCTION

Inventor: Vogels et al.

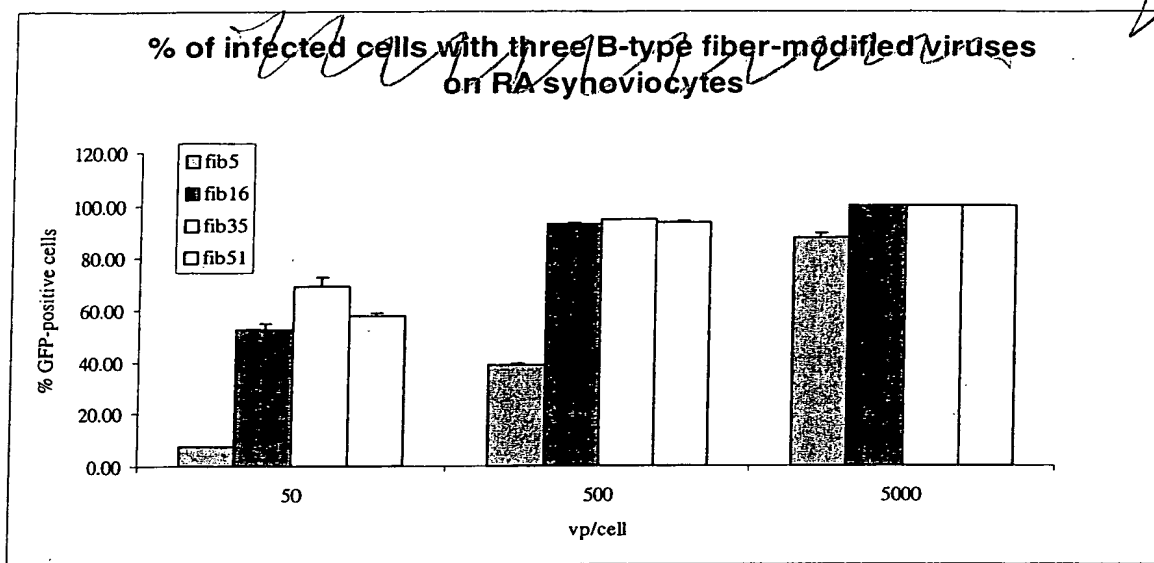
Serial No.: 09/517,898

Docket No.: 2578-3982.2US

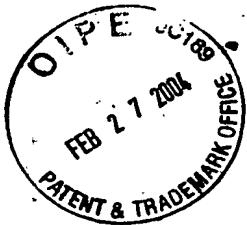
312 Amdt. Dated February 23, 2004

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Figure 18A



- ① Enlarge + Rotate + Remove Border : Fig. legend
- ② add centered "FIGURE 18A"



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR  
MACROPHAGE-LIKE CELL TRANSDUCTION

Inventor: Vogels et al.

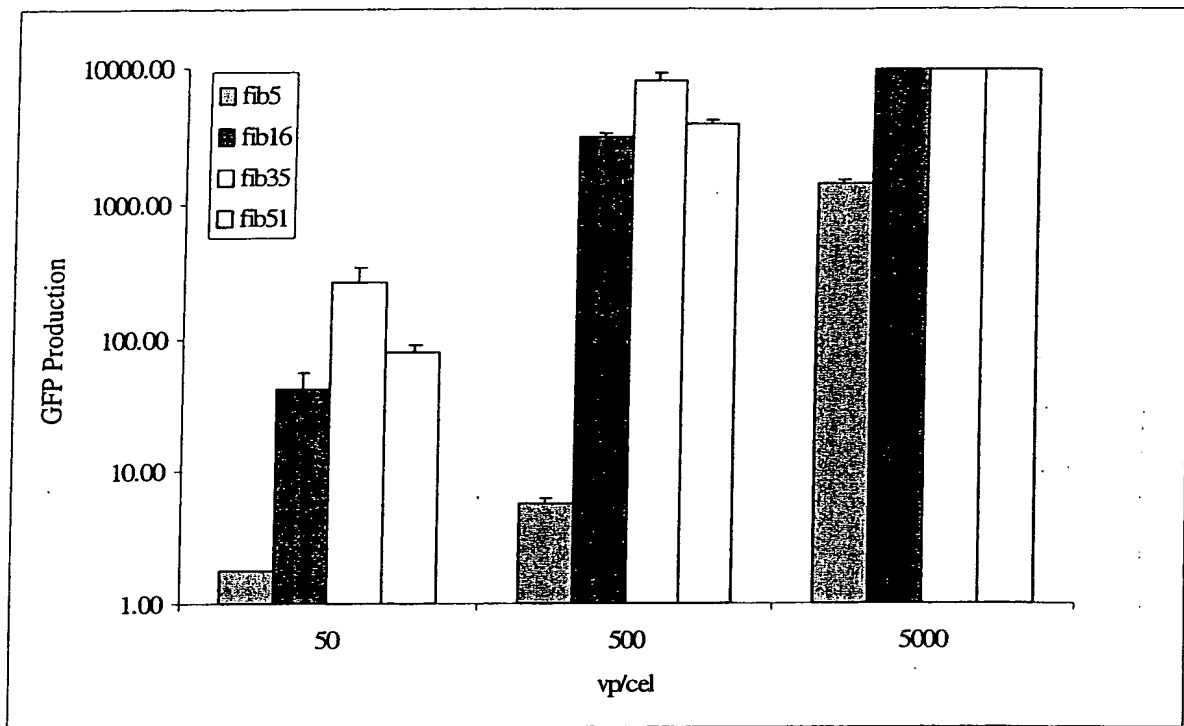
Serial No.: 09/517,898

Docket No.: 2578-3982.2US

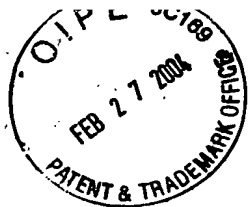
312 Amdt. Dated February 23, 2004

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Figure 18B: GFP production with three B-type fiber-modified viruses on RA synoviocytes



- ① Enlarge + Rotate + Remove Border : Fig. legend  
② add centered "FIGURE 18B"



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR  
MACROPHAGE-LIKE CELL TRANSDUCTION

Inventor: Vogels et al.

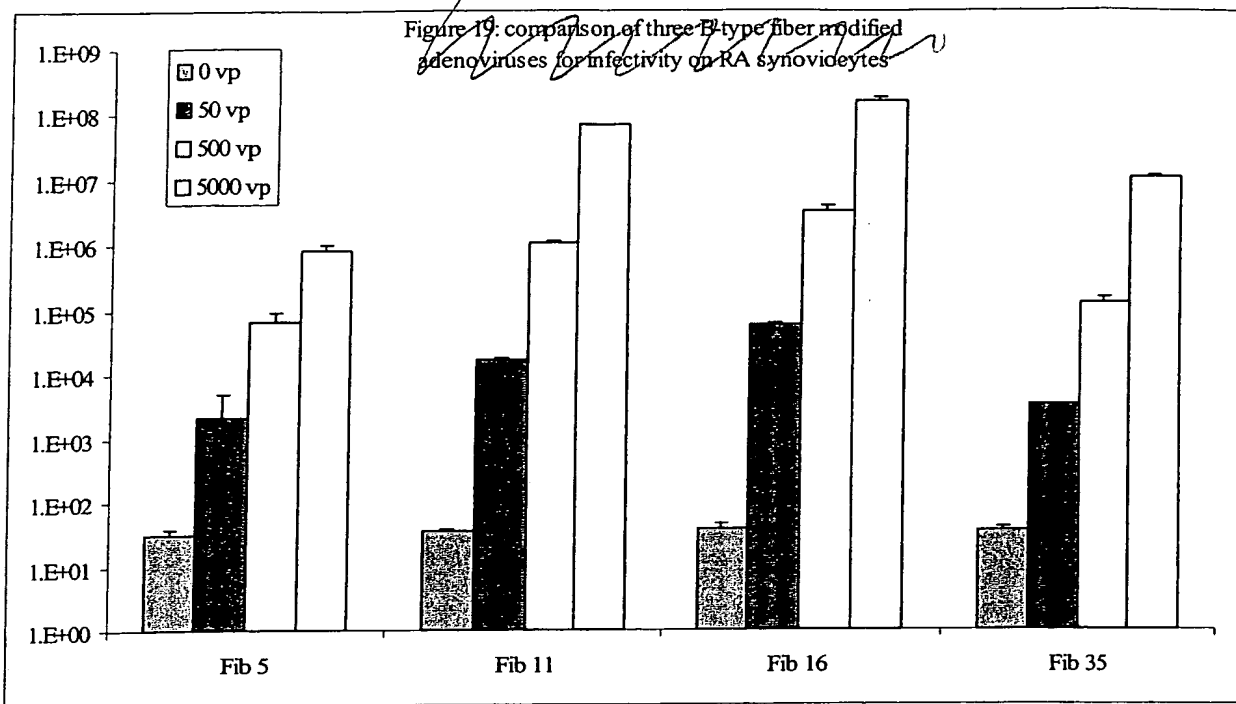
Serial No.: 09/517,898

Docket No.: 2578-3982.2US

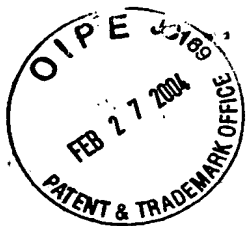
312 Amdt. Dated February 23, 2004

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Figure 19



- ① Enlarge + Rotate + Remove Border : Fig. legend
- ② add centered "FIGURE 19"



TITLE: MEANS AND METHODS FOR FIBROBLAST-LIKE OR  
MACROPHAGE-LIKE CELL TRANSDUCTION

Inventor: Vogels et al.

Serial No.: 09/517,898

Docket No.: 2578-3982.2US

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Figure 20: comparison of infectivity Ad5.lacZ vs. Ad5.fib16.lac6 in RA synoviocytes  
from

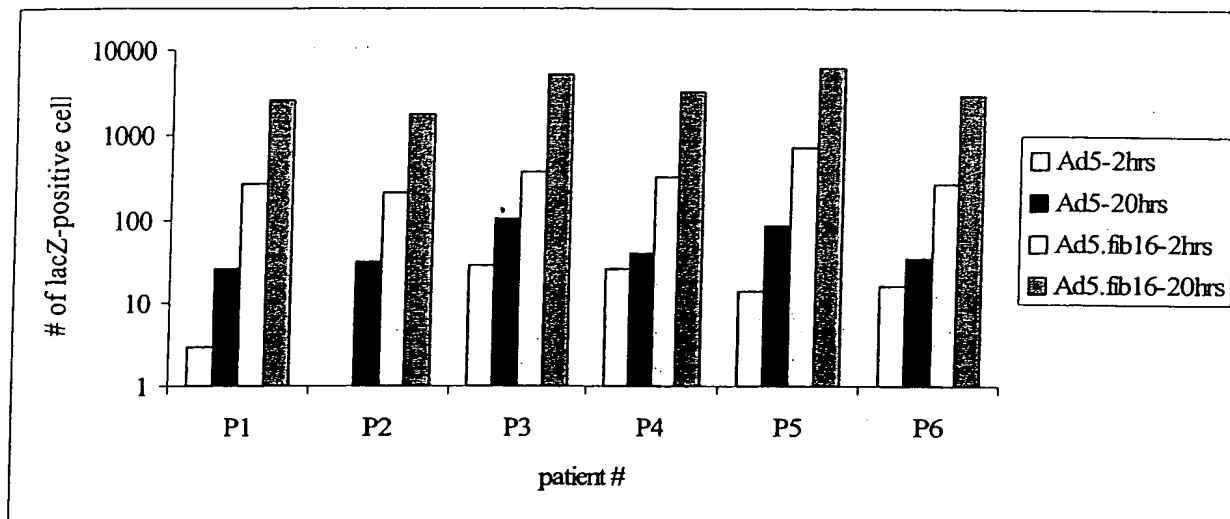


FIGURE 20

- ① Enlarge + Rotate + Remove Border : Fig. legend
- ② add centered "FIGURE 20"